# DAMARISCOTTA RIVER

## MAINE

## SURVEY

(REVIEW OF REPORTS)



U.S. ARMY ENGINEER DIVISION, NEW ENGLAND CORPS OF ENGINEERS WALTHAM, MASS.

7 AUGUST 1963

### TABLE OF CONTENTS

Paragraph No.	Subject	Page No.
1	Authority	1
	Purpose and Extent of Study	2
3	Description of Navigation Conditions	2
ž ·	Tributary Area	2
ă .	Bridges	2
2 3 5 8 9		2 3 3 4
10	Prior Reports	3
	Existing Corps of Engineers Projects	4
11.	Local Cooperation on Existing and Prior Projects	4
12	Other Improvements	},
13	Terminal and Transfer Facilities	Ĭ.
16	Improvements Desired	दे
20	Commerce and Vessel Traffic	6
23	Difficulties Attending Navigation	74 25 6
24	Water Power and Other Special Subjects	6
25	Plan of Improvement	6
26	Shoreline Changes	7
27	Required Aids to Navigation	7
28	Estimates of First Cost; Annual Charges, and Benefits	
31.	Apportionment of Costs and Proposed Local Cooperation	8
32	Coordination With Other Agencies	8
34	Discussion	8
36	Conclusion	9
37	Recommendation	9
Appendix A		A-1
Appendix B		B <b>-1</b>
	U. S. Fish and Wildlife Service Reports	C-1
Appendix D	Correspondence	D-1.
	Maps Accompanying Report:	,
Plate No. 1 Plate No. 2	Report Map - File No. 1587 D-7-1 Survey Map - File No. 1457 D-7-1	Sheet 1 of 1 Sheet 1 of 1

#### SURVEY (REVIEW OF REPORTS)

#### DAMARISCOTTA RIVER, MAINE /

#### SYLLABUS

The Division Engineer finds that Federal provision of locally desired anchorages 8 and 10 feet deep at Damariscotta-Newcastle Harbor is not warranted for the existing and prospective recreational and fishing fleets. He does find economic justification for one small anchorage of lesser depth based on anticipated retreational benefits. No significant commercial fishing benefits would develop. However, local interests are unwilling and unable to meet the necessary requirements of local cooperation and participation in Federal improvement. Therefore, the Division Engineer recommends no additional Federal improvement for navigation in Damariscotta River at this time.

## U. S. ARMY ENGINEER DIVISION, NEW ENGIAND CORPS OF ENGINEERS WALTHAM, MASS.

NEDGW

SUBJECT: Survey (Review of Reports) on Damariscotta River,

Damariscotta, Maine

TO : Chief of Engineers
ATTN: ENGCW-P

Washington, D.C.

#### **AUTHORITY**

1. This report is submitted in compliance with the following resolutions:

a. Resolution adopted July 29, 1949 by the Committee on Public Works of the United States Senate, as follows:

"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE, that the Board of Engineers for Rivers and Harbors, created under Section 3 of the River and Harbor Act, approved June 13, 1902, be, and is hereby, requested to review the report of the Chief of Engineers on Damariscotta River, Maine, dated November 11, 1920, with a view to determining the advisability of providing improvements for navigation on that stream at the present time."

b. Resolution adopted April 25, 1951 by the Committee on Public Works of the House of Representatives, as follows:

"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF REPRESENTATIVES, UNITED STATES, that the Board of Engineers for River and Harbors, be, and is hereby, requested to review the reports on Damariscotta River, Maine, submitted to Congress on February 23, 1921, with a view to determining whether the recommendations therein should be modified in any way at this time, particularly with reference to dredging at the channel and providing a safe anchorage basin."

#### PURPOSE AND EXTENT OF STUDY

2. This study was made to determine the engineering feasibility and economic justification for providing navigation improvements for the commercial and recreational fleets in the Damariscotta-Newcastle Harbor area. A public hearing was held at Damariscotta on 1 April 1958, and hydrographic surveys were made in 1958 and 1960. Data for the study was obtained from field investigation and by contact with public officials and private interests. Conferences have been held with local officials to discuss considered improvements and requirements of local cooperation. The U.S. Fish and Wildlife Service was requested to investigate and report on present and prospective commercial fishing in the harbor.

#### DESCRIPTIONS OF NAVIGATION CONDITIONS

- 3. Damariscotta River is a tidal estuary, the mouth of which is located approximately 40 miles by water northeast of Portland, Maine. The river extends northward about 15 miles from the mouth to the Damariscotta-Newcastle highway bridge, which marks the head of navigation. Salt Pond and Damariscotta Lake, 3 and 8 miles upstream of the highway bridge respectively, constitute the headwaters of the river.
- 4. Three river indentations located just south of the highway bridge comprise the Damariscotta-Newcastle harbor area. It is this portion of the river which local interests wish improved for navigation by dredging to provide additional anchorage. The areas are located: (1) east of the bridge north of Norris Point (2) west of the bridge north of Jacks Point, and (3) just south of Jacks Point. At mean low water, a substantial part of these areas are mud flats. There is a mound of boulders 50-100 feet in diameter located about 200 feet south of the southwest corner of the Damariscotta town parking area. The top elevation of the boulders is about 1-4 feet above mean low water. A collapsed, stone-filled, timber crib pier is located at the entrance to the cove above Jacks Point. It is roughly a 50 by 80 foot pile of stones with a top elevation of 3.0 feet above mean low water. The mean range of tide is 9.3 feet.

#### TRIBUTARY AREA

5. There are several towns immediately tributary to the

Damariscotta River. The Towns of South Bristol, Boothbay, and Boothbay Harbor are located at or near the mouth of the river. Damariscotta and Newcastle are located on the east and west sides of the river, respectively, approximately 15 miles upstream of the mouth. The Town of Nobleboro is situated near the headwaters about 1 miles upstream of Damariscotta.

- 6. The 1960 Census indicated populations of 1,093 and 1,101 for the Towns of Damariscotta and Newcastle, respectively. These figures represent a combined total increase of about 3 percent over the 1950 census figures. The Towns are the shopping and commercial centers for an area devoted to farming and vacation travel activities. Some income is also derived as a result of fishing and recreational boating. Nobleboro had a population of 679 (1960). The return from the fish catch of Alewives and smelts represent a source of income to this town as well as to the Town of Newcastle. South Bristol is a coastal township with income received from commercial fishing and cottage colonies. Boothbay and Boothbay Harbor have intensive vacation-travel developments as well as commercial fishing and boat building.
- 7. Highways extend from U.S. Route 1 at Damariscotta-Newcastle south along both sides of the river to the scenic coastal areas. Damariscotta-Newcastle also is served by the Maine Central Railroad.

#### BRIDGES

8. Two bridges span Damariscotta River. The U.S. Route 1A highway bridge spans the waterway between the village centers of Newcastle-Damariscotta and essentially constitutes the head of navigation. The recently completed Route 1 highway bridge crosses the waterway approximately one mile upstream of the Route 1A bridge.

#### PRIOR REPORTS

9. A survey report dated 23 October 1903 and published in House Document No. 53, 58th Congress 2nd Session, was favorable to improvement of the harbor. It provided for removal to 9 feet of a shoal obstructing the approach to the wharves at Damariscotta. A preliminary examination report dated 11 November 1920, unpublished, was unfavorable to modifying the existing project to provide for removal of an old rock-filled crib pier at Newcastle.

#### EXISTING CORPS OF ENGINEERS! PROJECT

10. The existing project, which is the original project for the Damariscotta River, was adopted by the River and Harbor Act of 3 March 1905. It provided for dredging a shoal area near the principal wharf at Damariscotta to a depth of 9 feet. This project was completed in 1906. No work has been done on the project since its completion.

#### LOCAL COOPERATION ON EXISTING AND PRIOR PROJECTS

11. There were no requirements of local cooperation on the existing project.

#### OTHER IMPROVEMENTS

12. There have been no improvements made for general navigation other than those performed by the Federal Government.

#### TERMINAL AND TRANSFER FACILITIES

- 13. There are two landing facilities at Damariscotta-Newcastle Harbor. A 100 by 200-foot pier of cribwork and rock ballast construction, located east of the bridge, is used primarily for commercial landings. It is used almost exclusively by Saltwater Farm, Inc., engaged in the interstate shipment and local sale of sea foods. This commercial enterprise has a restaurant on the pier, a principal office in Damariscotta, general offices and a shipping plant in Newcastle, and a lobster and clam receiving and storage plant in South Bristol. The berthing depth alongside the pier is 9 feet.
- lh. The Twin Village Yacht Club owns and maintains a 45 by 200 foot cribwork and rock ballast pier just west of the bridge. There is 12 by 24-foot landing float located at the end of the pier, which has a 9-foot berthing depth. This landing, which is maintained by appropriations from the Towns of Damariscotta and Newcastle, is open to the public, primarily for recreational boating.
- 15. The Riverside Boat Yard of Newcastle is located south of Jacks Point on the west side of the river. A set of ways is available for hauling and launching boats. The company reports that about 40 boats are hauled out of the water each year for winter storage and repair. The ways can be approached by boats only at near high tide as this area is about 6-7 feet

above mean low water. There are several other small private docking facilities in the Damariscotta-Newcastle harbor area.

#### IMPROVEMENTS DESIRED

- 16. The improvements requested by local interests at the public hearing consisted of dredging three anchorage areas for fishing and recreational craft: (1) A 10-foot anchorage, 4.8 acres in area, on the Damariscotta side of the channel near the highway bridge (2) a 10-foot anchorage, 2.11 acres in area on the Newcastle side of the channel near the bridge, and (3) an 8-foot anchorage, 4.82 acres in area on the west side of the channel in the vicinity of the Riverside Boat Yard. These areas are shown on the map accompanying this report.
- 17. Other desires expressed at the hearing were: (a) dredging an ll-foot channel from the rivers mouth to the Route lA highway bridge (b) dredging an ll-foot anchorage basin at the head of navigation (c) fill in an area on the Damariscotta side to form a parking area and a town landing.
- 18. Relative to the desired improvement listed above as (c), local interests have since constructed a dike generally as outlined. The area behind the dike has been filled and graded for use as a parking area. Relative to the desires listed above as (a) and (b) that is, an 11-foot river channel and anchorage, further interests in the possibility of providing a deeper channel was shown in a letter dated 19 May 1961 from the Governor of Maine. The letter indicated that the deeper channel was needed for the receipt of grain brought into Maine by water for the large poultry companies in the area. Investigation indicated that economic justification of channel deepening appeared slight due to the existence of competitive nearby ports on the Kennebec and Sheepscot Rivers. The lesser river improvement for fishing and pleasure craft appeared to be worthy of study. As a result of the above investigation, the Planning Board of the Town of Damariscotta by letter dated 28 February 1962, voted that consideration of channel deepening be deferred at least until completion of the study to determine the need and justification of the desired anchorage facilities.
- 19. This report has considered only the need for anchorage facilities listed as (1), (2), and (3) above.

#### COMMERCE AND VESSEL TRAFFIC

- 20. The commercial fishing industry of the Damariscotta River area consists of the taking of lobsters, crabs, clams, alewives, smelts, mussels, and marine worms. Local information indicates that about 20-25 boats, primarily 14 to 16-foot outboard skiffs, are engaged in obtaining annual landings of 21,600 pounds of lobsters, 8,000 pounds of crabs, and 1,500 bushels of clams. However, the United States Fish and Wildlife Service in their supplemental report of 11 December 1962, find that the "landings" actually apply almost entirely to deliveries made overland by trucks and not landings from vessels. The report states that the truck method of delivery is expected to be continued in the future.
- 21. Alewives are taken in the river reach lying upstream of the Damariscotta-Newcastle harbor area by means of floating traps. Smelts are obtained from the small tributary streams of the Damariscotta River by use of hand lines and to a lesser extent by dip nets. The amount of mussels and marine worms taken annually is small.
- 22. Vessel traffic on the waterway is by several lobster boats, 15-20 outboard skiffs engaged in taking clams and crabs, and approximately 50 recreational boats.

#### DIFFICULTIES ATTENDING NAVIGATION

23. The major navigation difficulty results from insufficient safe anchorage area of adequate depth for the existing and prospective fishing and recreational fleets near the village centers. A broken timber crib-rock ballast pier located in the cove on the east side of the channel near the highway bridge, mud flats on both sides of the channel, and strong shifting river currents near the bridge, limit safe anchorage areas of adequate depth.

#### WATER POWER AND OTHER SPECIAL SUBJECTS

24. There are no problems pertaining to water power, flood control, pollution or related subjects attendant to this harbor, area and the desired improvement.

#### PLAN OF IMPROVEMENT

25. Estimates made of the costs and probable benefits for providing the desired anchorages, 8 and 10 feet deep, indicated a substantial lack of justification. However, consideration

was given to providing a smaller 6-foot anchorage. A 4.8 acre anchorage, 6 feet deep was found warranted. It would be located in the same area as one of the three anchorages desired - on the Damariscotta side of the river. This anchorage, when included with the natural anchorage areas of sufficient depth already available, would meet the needs of the existing local fishing and recreational craft and would provide space for future growth.

#### SHORELINE CHANGES

26. The proposed improvement would not affect the shoreline.

#### REQUIRED AIDS TO NAVIGATION

27. The U.S. Coast Guard was not consulted on additional navigation aids that would be required if the harbor were improved because of the questions of justification and acceptance of the plan of improvement. Because additional aids might be required for an anchorage improvement, an estimate has been included in the cost estimate.

#### ESTIMATES OF FIRST COST, ANNUAL CHARGES AND PENEFITS

- 28. The total project cost for providing 4.8 acres of anchorage 6 feet deep in the Damariscotta harbor area has been estimated to be \$61,000 (July 1963), including engineering and design, and supervision and administration, but excluding pre-authorization study costs. The total annual charges are estimated to be \$3,400, which includes \$2,300 for interest and amortization on the total Federal and non-Federal investment and \$1,100 for annual maintenance. Details of the estimates of first costs and annual charges are given in Appendix A.
- 29. It is considered that benefits would accrue to the existing and prospective recreational fleet. These recreational benefits have been estimated to be \$\psi\_1,100\$. No benefits were found for commercial fishing interests. Investigations of the U.S. Fish and Wildlife Service indicated relatively few shell-fish landings by boat in the harbor, and no significant potential for benefits from commercial fisheries as a result of harbor improvement. Details of the estimate of benefits accruing to recreational interests are given in Appendix B.
- 30. A comparison of the estimated annual benefits of \$4,100 with the estimated annual charges of \$3,400 results in a benefit-cost ratio of 1.2 to 1.

#### APPORTIONMENT OF COSTS AND PROPOSED LOCAL COOPERATION

31. The benefits that would result from the improvement are recreational in nature. Therefore, local interests should be required to make a cash contribution equal to 50 percent of the first cost of construction, estimated at \$30,000. In addition, local interests would be required to (a) provide without cost to the United States an adequate public landing open to all on equal terms; (b) provide and maintain a berthing area at the landing with a depth commensurate with the 6-foot anchorage; (c) provide without cost to the United States all necessary lands, easements, and rights-of-way required for construction and subsequent maintenance of the project including suitable spoil disposal areas with necessary retaining dikes and bulkheads therefor; (d) hold and save the United States free from damages that may result from construction and maintenance of the project.

#### COORDINATION WITH OTHER AGENCIES

- 32. All Federal, State, and local agencies known to have an interest in the development and use of Damariscotta-Newcastle Harbor, were notified of the public hearing on the proposed improvement held at Damariscotta on 1 April 1958. Local intersts were consulted on the study indications at a meeting held on 17 April 1963.
- 33. The U. S. Fish and Wildlife Service has been consulted and has furnished information on fishing benefits and the effect of the considered improvement on fish and wildlife resources. Their reports are contained in Appendix C.

#### DISCUSSION

34. The harbor at Damariscotta-Newcastle is used by recreational boats and small fishing craft. The harbor, 15 miles from the open sea, has potential for increased recreational boating use. Commercial fish landings, by boat at harbor facilities, are small. Benefits could be expected to accrue to the existing and prospective recreational fleet if the harbor were improved. No significant benefits could be expected to accrue to the commercial fisheries. The magnitude of the benefits indicated that the desired 12 acres of anchorage, 8 and 10 feet deep would not be justified. However, a smaller anchorage 4.8 acres in area

and 6 feet deep at Damariscotta was found warranted.

35. A meeting was held with local officials of Damariscotta and Newcastle on 17 April 1963 to discuss (1) the acceptability of the considered plan of improvement, and (2) the accompanying requirements of local cooperation. The Selectmen of the Town of Damariscotta, which would be the public body responsible for providing the necessary cooperation and participation for the improvement, stated that while the proposed anchorage was desirable the requirements of local cooperation could not be met because of other pending financial burdens. The position of the Town of Damariscotta was confirmed by letter of May 15, 1963 from the Chairman of the Board of Selectmen for Damariscotta. A copy of this letter is given in Appendix D.

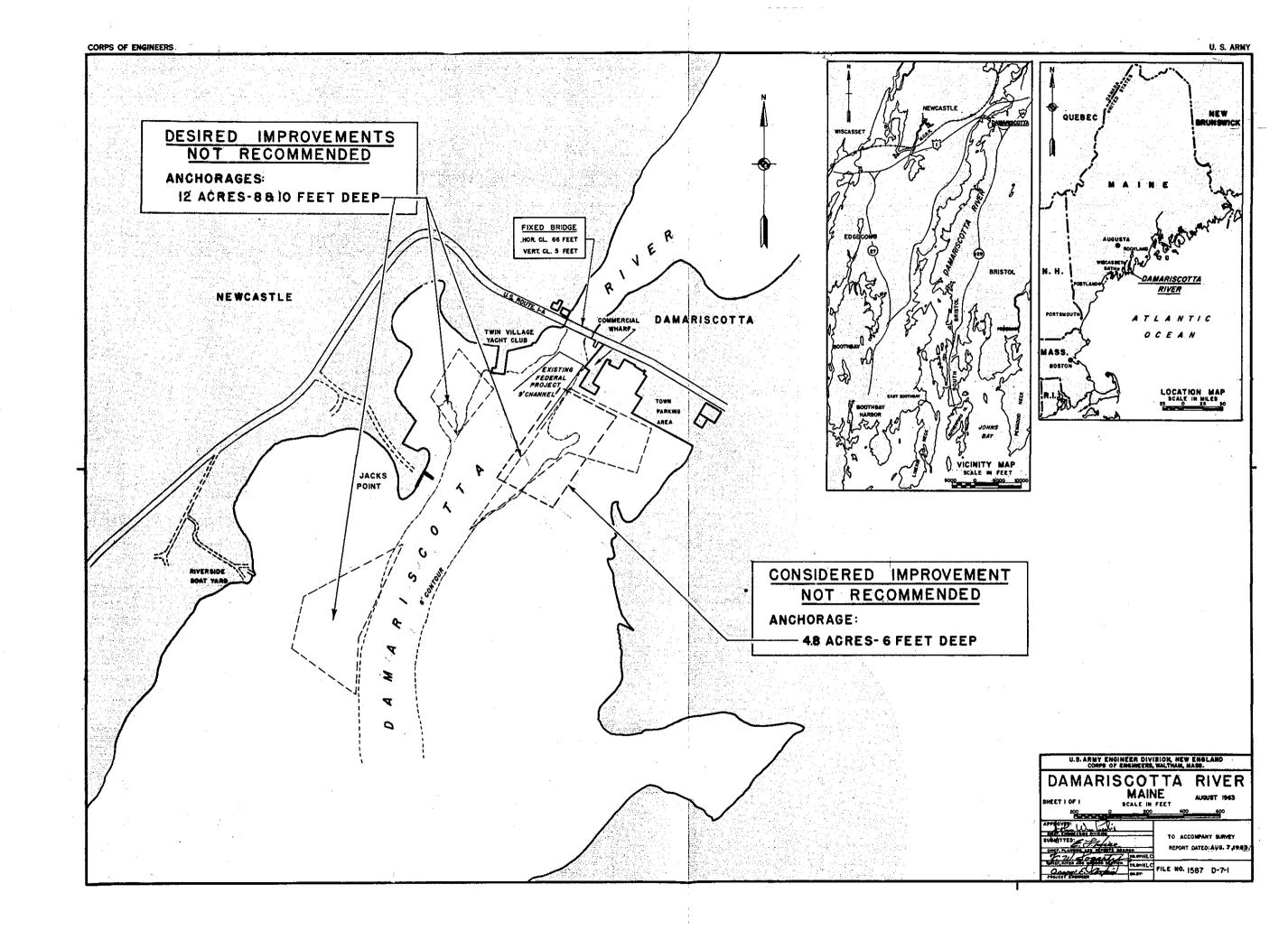
#### CONCLUSION

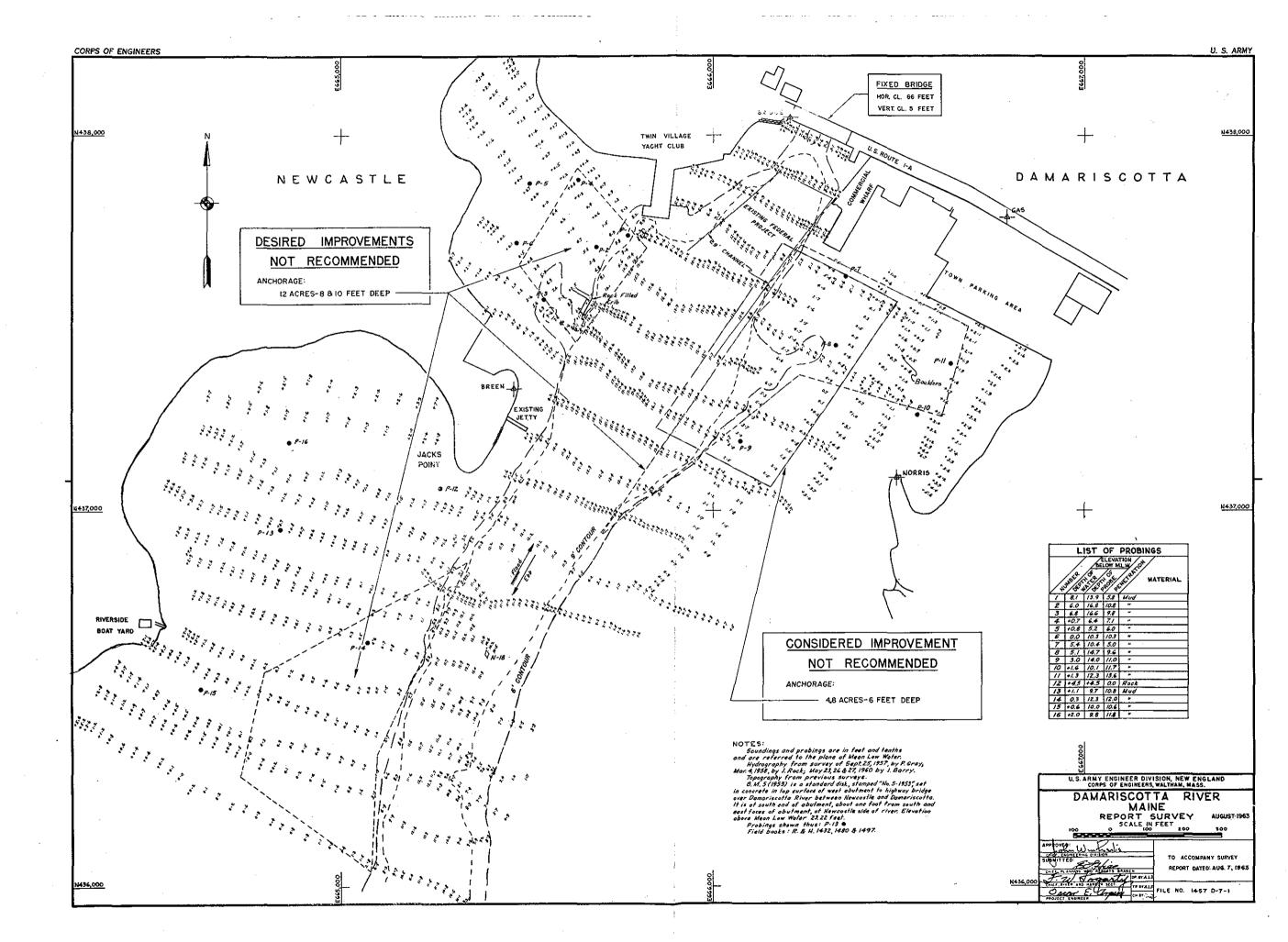
36. The Divison Engineer concludes that although a small boat anchorage at Damariscotta harbor is economically justified on the basis of recreational benefits the Town of Damariscotta is unable and unwilling to meet the requirements of local cooperation at this time.

#### RECOMMENDATION

37. In view of the foregoing, the Division Engineer recommends no modification of the existing Federal navigation project in the Damariscotta River, Maine at this time,

P. C. HYZER Brigadier General, USA Division Engineer





#### SURVEY (REVIEW OF REPORTS)

#### DAMARISCOTTA RIVER, MAINE

#### APPENDIX A

#### ESTIMATES OF FIRST COST AND ANNUAL CHARGES

- 1. The first cost and annual charges of the navigation improvement considered in the study are given below. Federal construction would consist of dredging to provide a 4.8 acre anchorage. 6 feet deep in the harbor at Damariscotta.
- 2. Quantity estimates were based on hydrographic surveys made in 1958 and 1960. The unit cost for dredging is based on removal of mud, sand, and gravel by hydraulic dredge with placement of materials on nearby land spoil areas. The unit cost is based on prices prevailing in July 1963 for similar work in the area. Dredging estimates are based on in place measurements, 1 on 3 side slopes and an allowance of one foot for overdepth. These costs are preliminary. Further investigation would be required to determine the exact location and extent of the mound of boulders adjacent to the easterly limit of the considered anchorage. A tentative evaluation was made of the additional navigation aids that might be required.
- 3. Annual charges were computed using a project life of 50 years and Federal and non-Federal interest rates of 2 7/8 percent. Future annual maintenance was based on an estimated shoaling rate of about 5,000 cubic yards every 10 years.

#### PROJECT COST ESTIMATE

Cost Account Number	<u>Item</u>	Cost Estimate (July 1963)
09	Anchorage - 4.8 ac., 6 ft. deep (Dredging 22,000 c.y. @ \$1.75) = \$38,000	
	(Contingencies @ 15% = \$6,000)	\$1,4,000
29	Preauthorization Studies	7,000
30	Engineering and Design	8,000

Cost Account Number			Estimate ly 1963)
31	Supervision and Administrati	on <u>\$</u>	8,000
	Total Cost (Corps of Enginee and Non-Federal Contribution		67,000
	Aids to Navigation (U. S. Co. Guard)  TOTAL PROJECT CO.	·	1,000 68,000
7	Non-Federal Contibutions		30,000
TOTAL NON-FEDE	CRAL COSTS		
Cash cor	tribution (50% of \$60,000)	\$	30,000
Public ]	anding (Pier, floats, and ber	ths)	7,000
Spoil di	sposal areas (dike cost)	\$	3,000 40,000
SUMMARY OF EST	TIMATED COSTS	. •	
Federal Cost			
Corps of	Engineers	\$	37,000
U. S. Coa	st Guard	\$	1,000 38,000
Non-Federal Co	osts	<u>\$</u>	40,000
Total Fed	leral and Non-Federal costs	\$	78,000
INVESTMENT	A NNUAL CHARGES		
Federal		\$	31,000
Non-Federa	1		30 <u>,000</u>
		Total \$	61,000
			-

#### ANNUAL CHARGES

#### Federal

Interest and Amortization (.03795 x \$31,000)	•	\$1,200
Maintenance: Dredging (500 c.y. @ \$2.00)		1,000
Navigation Aids		100
	Total Federal	\$2 <b>,</b> 300
Non-Federal		
Interest and Amortization (.03795 x \$30,000)		1,100 \$3,400

## SURVEY (REVIEW OF REPORTS) Damariscotta River, Me.

#### APPENDIX B

#### BENEFITS

- 1. Studies were made to determine whether tangible commercial fishing and recreational benefits would accrue from provision of a Federal anchorage in Damariscotta-Newcastle Harbor. U. S. Fish and Wildlife Service has reported that no significant potential for benefits from commercial fisheries could be expected as a result of harbor improvement. A potential for increased recreational boat use does exist for the harbor area. Benefits have been estimated for the existing and prospective recreational fleets based on a net "for hire" return.
- 2. It is expected that an anchorage improvement in Damariscotta-Newcastle Harbor would result in benefits to the existing recreational fleet through increased use. Also, it is estimated that improvement would result in the purchase of new boats by nearby residents, attract boats from other small nearby coves and inlets, and increase the number of visiting craft. These benefits are shown in detail on the following tables. Total benefits have been estimated to be \$4,100 for an existing recreational fleet of about 50 boats and a prospective fleet of 48 boats.

HARBOR:

#### BENEFITS TO RECREATIONAL BOATING

#### Locally Based Fleet

Type of Craft	Length (feet)	No. of Boats	Deprecia: Average	ted Value Total	Ideal	. % of	nt Retu Ideal Future	<u>rn</u> Gain	Value \$	Avg.	Cruise % of Seaso	Value
Recreation	nal Flaat			· · · · · · · · · · · · · · · · · · ·	······		<del></del>					
Outboards		16	\$ 1,000	\$16,000	12	90	100	1.2	190		_	_
Inboards	10-20	11	1,300	14,300	12	-85	100	1.8	260		_	_
Cruisers	15-30	6	3,000	18,000	9	80	100	1.8	320	5	5	20
	31-40	14	4,500	18,000	9	80	100	1.8	320	8	- 8	30
Aux. Sail	15-30	14	3,000	12,000	9	80	100	1.8	210	5	. 5	10
Sailboats	10-20	$\mathcal{V}_{1}$	600	400و 2	12	85	100	1.8	40	-		-
	21-30	4	1,500	6,000	9	80	100	1.8	110	- 5	5	10
Charter Bo	oats_	. P. Company	•	•			•		Ē	-		
Cruisers	36-50	l	10,000	10,000	14	90	100	1.4	140	<b>1</b> 5	15	20
Totals		50		\$96 <b>,</b> 700				\$	1,590		· ·	\$90

Total Benefits = \$1,590 - 90 = \$1,500

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#### BENEFITS TO RECREATIONAL BOATING

#### Transferred Boats

						Perce	nt Retur	<u>n</u>			RUISE
Type of	Length	No. of	Depreciat		Ideal.	% of	Ideal	Gain	Value	Avg. %	of Value
Craft	(feet)	Boats	Average	Total	· · · · · · · · · · · · · · · · · · ·	Pres.	Future			Days S	eason
Recreation	teal Flant	·	*	: - :							
		•	2.5								
Outboards	10-20	2	000 1,000	2,000	. 12	-90	100	1.2	.20		
Inboards	10-20	1	1,300	1,300	12	85	100	1.8	20		•
Cruisers	15~30	2	3,000	6,000	-9	80	100	1.8	110	5	5 10
	31-40	1	4,500	4,500	9	80	100	1.8	80	8	8 10
Aux. Sail	15-30	1	3,000	_3 <b>,</b> 000	9	80	100	1.8	50	5	5 10
Sailboats	10-20	l	600	600	12	85.	100	1.8	10		4
	21-30	1	1,500	1,500	9	80	100	1.8	30	5	5 -
Charter Be	oats					•					
Cruisers	36-50	1	10,000	10,000	1/4	90	100	1.4	<b>1</b> /10	15 1	5 20
Totals		10	\$28,900						<b>\$</b> 460		\$50

Total Benefits = \$460 - 50 = \$410

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#### TABLE III

#### PENEFITS TO RECREATIONAL BOATING

#### New Boats

			÷ .			Percent Return				y On Cruise		
Type of Craft	Length (feet)	No. of Boats	Depreciat Average	ed Value Total	Ideal	% of Pres.	Ideal Future	Gain	Value		% of Seaso	
Recreation	nal Fleet	<u>t</u> .	· · · · · · · · · · · · · · · · · · ·	•								
Outboards	10-20	3	1,000	3,000	12	0	100	12	360	_	•	-
Inboards	10-20	2	1,300	2,600	12	0	100	12	310	-	_	-
Cruisers	15-30	ī	3,000	3,000	. 9	- 0	100	9	270	5	5	10
	31-40	1	4,500	500و لم	9	0	100	9	410	8	- 8	· 30
Sailboats		1	600	600	12	0	100	12	70	-	-	•
	21-30	1	1,500	1,500	9	0	100	9	130	5	5	10
Totals		. 9		\$15,200				4	550			\$50

Total Benefits = \$1,550 - 50 = \$1,500

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HARBOR: Damariscotta River

#### TABLE IV

(Season 100 days)

#### BENEFITS TO RECREATIONAL BOATING

#### ATTRACTED EQUIVALENT TRANSIENTS

in Might de Saware in the Co. Ceann a sawar and a sawar		* \$ .				Perce	ent Retu	ırn	1 1 1 1 N 2		Cruis	е
Type of	Length	No. of	Depreciat	ed Value	Ideal	% of	Ideal	Gain	Value	Avg.	% of	Value
Craft	(feet)	Boats	Average	Total		Pres.	Future	)	\$	Days	Season	\$
Recreation	nal Fleet	  -				1.7	•	7"		•	**	
Outboards	10-20	•••		-		- '	-	-	-	<b>-</b> ,	- "	-
Inboards	10-20	-	, <b>-</b>	-	-			- '	-	-		-
Cruisers	15-30	1 -	3,000	3,000	9	80	100	1.8	50	•	1.0	
:	3 <b>1-</b> 40	1	4,500	4,500	9	80	100	1.8	80		. "	
Aux. Sail	15-30	***	-	-		-	-	-	**	-	<b></b>	-
Sailboats	10-20	1	600	600	12	85	100	1.8	10	ē	*	
Charter Bo	oats											
Cruisers	21~35	-	P46 '	~	-	-		-	-	-	-	
Totals		4		\$11,100	1.4		-		\$190		•	

Total Benefits = \$190

S.

#### BENEFITS TO PLEASURE BOATING

#### EXISTING EQUIVALENT TRANSIENTS

Type of Craft	Length (feet)	No. of Boats	Depreciat Average	ed Value Total	Ideal	% of	ent Ret Ideal Future		Value \$			Value
Recreation	nal Fleet	ي .				•		1 14				
Outboards	10-20	-	<b></b>	-	***	-	•••		-		-	-
Inboards	10-20	. <u>1</u>	1,300	1,300	12	85	100	1.8	20	<del>-</del>	~	_
Cruisers	15-30	1	3,000	3,000	9	80	100	1.8	50	- -	-	•
	31-40	1	4,500	4,500	- 9	80	100	1.8	80	-	-	-
Aux. Sail	15-30	1	3,000	3,000	9	80	100	1.8	50	••	-	<b></b>
Sailboats	10-20		-		-	. 🕳 🖰	-		<del>, _</del>	-	٠ 🕳	
	21-30	1	1,500	1,500	9.	80	100	1.8	30	<b></b> , ,		. 🛶
Charter Bo	oats	*	•	•	- •				•			
Cruisers	21-35	-	•	-	-	-	-		-	-	-	-
Totals	e de la companya de La companya de la co	5	, *	\$13,300				,	\$230	. 7.		

Total Benefits = \$230

<u>В</u>

HARBOR: Damariscotta River

#### TABLE VI

Season 100 days)

#### BENEFITS TO RECREATIONAL BOATING

#### NORMAL GROWTH - 20

		e			Perc	ent Reti	${f rn}$		On Cruise			
Type of Craft	Length (feet)	No. of Boats	Depreciat Average	ed Value Total	Ideal	£	<u>Ideal</u> Future	Gain	Value		% of Seaso	Value
OTATO	(TOOO)	DOGUS	WAGTSEG	TOVAL		IICS.	rucare			Days	Seast	iт ф
Recreation	nal Fleet	••	_		ę				• • .			
Outboards	10-20	5	1,000	5,000	12	90	100	1.2	60		-	-
Inboards	10-20	6	1,300	7,800	12	85	100	1.8	140	-	<b>á</b>	-
Cruisers	15-30	3	3,000	າ,000	9	80	100	1.8	160	5	5	10
3	31-40	1	4,500	4,500	9	80	100	1.8	80	8	8	10
Aux. Sail	15-30	2	3,000	6,000	- 9	80	100	1.8	110	5	5	10
Sailboats	10-20	2	600	1,200	12	85	100	1.8	20	<u>-</u>	_	-
÷,	21-30	1	1,500	500وً1	9	80	100	1.8	30	5	5	-
Charter B	oats		•	•						1.		*
Cruisers	21-35	-	trab		-	-	••	-	-			
Totals		20	e e e e e e e e e e e e e e e e e e e	\$35,000		, .			\$600			\$30

Total Benefits = 600 - 30 = \$570

Eqv. ann. benefits -  $570 \times 0.396 = $220$ 

#### APPENDIX C

## UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE

September 7, 1961

Division Engineer New England Division U. S. Army Corps of Engineers 424 Trapelo Road Waltham 54, Massachusetts

Dear Sir:

This is our conservation and development report on the proposed Damariscotta Harbor navigation improvement project which contemplates dredging to enlarge harbor facilities. This report has the concurrence of the Maine Departments of Sea and Shore Fisheries and Inland Fisheries and Game.

The fisheries presently associated with the project area are not large. An alewife fishery exists upstream from Damariscotta, and some smelt dipping is carried on in small streams tributary to the Damariscotta River. However, neither of these would be affected by the project. There is a marine worm resource in the area, and a lobster pound in the river.

Commercial fishing is partially limited by poor harbor facilities, and under present circumstances most fishing vessels unload their catches at either South Bristol or East Boothbay. This occurs despite the fact that truck and rail facilities are available in the Damariscotta-Newcastle area and that Salt Water Farms, Inc., a firm which specializes in shipping live lobster and other seafood products, has its headquarters at Newcastle.

Improved harbor facilities could benefit the fishermen of the area in providing increased anchorage, as well as making it possible to land their catches in Damariscotta or Newcastle. The project will not adversely affect fish and wildlife resources.

We appreciate the opportunity to report on this project and contemplate no further studies or reports.

Sincerely yours,

John S. Jottschalk Regional Director

Bureau of Sport Fisheries & Wildlife

John T. Gharrett

Regional Director

Bureau of Commercial Fisheries

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
59 Temple Place
Boston 11, Massachusetts

December 11, 1962

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Division Engineer
U. S. Army Corps of Engineers
New England Division
424 Trapelo Road
Waltham 54. Massachusetts

Dear Sir:

We have prepared this supplement to our conservation and development report dated September 7, 1961, on navigation improvement for Damariscotta Harbor, in response to your letter dated September 14, 1962, and under authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). Your letter furnished a monetary evaluation prepared by your office on the basis of commercial fishery benefits anticipated by local interests.

We have carefully considered the data presented by local interests concerning the landings of shellfish accomplished by vessels presently using Damariscotta Harbor. Our findings are that the "landings" actually apply almost entirely to deliveries made overland by truck, and not landings from vessels.

We also conclude that, in the future, shellfish "landings" at Damariscotta Harbor will continue to be trucked in for the most part, due to the relative location of this harbor and others to shellfish resources capable of withstanding further exploitation.

We do not, therefore, regard the local appraisal of anticipated landings by vessel as realistic. Some increased local activity in lobstering and clamming may result from the proposed improvement but we cannot predict a significant increase in shellfish landings at Damariscotta. Any increases that might occur would not represent a real and significant increase in total harvest from the available resources but merely a shift in use of harbors.

In regard to trawlers, our investigations showed no groundfish landings being made at the present time at Damariscotta Harbor, nor has there been any indication to us that such landings would develop in the future. We see little likeli-hood of Damariscotta Harbor, 14 miles from the open sea, successfully competing for groundfish landings with other harbors more strategically located both from the standpoint of convenience to fishing vessels and facilities for marketing.

In short, the investigations of the Service lead us to the conclusion that Damariscotta Harbor has a high potential for increased recreational boating use; but no significant potential for benefits from commercial fisheries as a result of harbor improvement. The Maine Department of Sea and Shore Fisheries has been consulted relative to this project and does not completely concur with this report. In their opinion, the proposed improvement would probably produce some significant benefits to the fishermen of the area.

We regret, of course, that our conclusions do not coincide with those of Commissioner Green, but in view of our findings and analysis, we cannot recommend improvement of Damariscotta Harbor on the basis of anticipated benefits to commercial fisheries.

Sincerely yours,

John S. Gottschalk

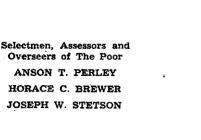
Regional Director

Bureau of Sport Fisheries and Wildlife

John T. Charrett

Regional Director

Bureau of Commercial Fisheries





Jollector and Treasurer: DAVID W. CHAPMAN

Clerk:
AUBINE B. MERRILL

### TOWN OF DAMARISCOTTA, MAINE

May 15, 1963

U.S.Army Engineers Division 424 Trapelo Road Waltham 54, Mass.

Gentlemen:

In reference to the current navigation study and proposed dredging of the Damariscotta River. The Town feels that the project is not of enough value to warrant the expenditure involved at this time. There may be at some future date renewed interest in this project.

I want to thank you gentlemen for your interest in this project and also for coming to Damariscotta for the hearing and explaining the plan to us.

Yours truly,

Anson T. Perley

Chairman

Board of Selectmen

ATP/hcb

### SURVEY (REVIEW OF REPORTS) DAMARISCOTTA RIVER, MAINE

Information called for by Senate Resolution 148, 85th Congress. Adopted 28 January 1958.

- 1. Navigation problems. Damariscotta River is a tidal estuary of the coast of Maine. The mouth of the river is located about 40 miles by water northeast of Portland, Maine. The portion of the river which local interests desire improved for navigation is the harbor at Damariscotta-Newcastle about 15 miles upstream from the open sea. Local interests desire dredging in the three river indentations that constitute the harbor, to provide an anchorage in each cove 8 and 10 feet deep and having a total area of 12 acres. The harbor area is used by recreational craft and small fishing vessels.
- 2. Improvements considered. The desired improvement was found to be not economically justified based on the estimated benefits. Benefits were taken for recreational boating. No significant benefits could be found for the commercial fisheries. Consideration was given to providing a Federal anchorage, 6 feet deep and about 4.8 acres in area at Damariscotta, and found to be economically justified. The first cost has been estimated to be \$60,000 (excluding preauthorization study costs of \$7,000, of which local interests would be required to contribute 50 percent, or \$30,000. Other requirements of local cooperation would include a public landing having a berthing depth commensurate with the 6-foot anchorage; suitable diked spoil disposal areas; and all necessary lands, easements, and rights-of-way required for construction and subsequent maintenance. The benefit-cost ratio is 1.2 to 1.
- 3. Discussion. A meeting was held with local officials at Damariscotta, Maine on 17 April 1963 to discuss acceptability of the considered plan of improvement and to determine if local interests would meet the requirements of local cooperation and participation. The town of Damariscotta stated that because of other pending financial burdens, the town would not be in a position to provide the necessary items of local cooperation in the event the improvement was authorized for construction.